



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
Environmental Sciences Center  
701 Mapes Road  
Fort Meade, Maryland 20755-5350

DATE : February 24, 2012

SUBJECT: Region III Data QA Review

FROM: Colleen Walling *Colleen K. Walling*  
Region III ESAT RPO (3EA20)

TO: Rich Fetzer  
Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (DAS:# R33917; SDG: #480-16100-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0042 TDF: 02100 Data Validation  
TO: #0042 TDF: #02085 Sample log-in processing

cc: Gene Nance (Techlaw)  
Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.  
Customer Service Hotline: 1-800-438-2474

Lockheed Martin IS&GS – Civil  
Energy & Environment  
ESAT Region 3  
US EPA Environmental Science Center  
701 Mapes Road Ft. Meade, MD 20755-5350

**LOCKHEED MARTIN**  
*We never forget who we're working for™*



**Ex. 4 - CBI**

**Date:** February 23, 2012

**Subject:** Organic Data Validation (M3 Level)  
Case: R33917  
Project: 480-16100-1  
Site: Dimock

**From:** **Ex. 4 - CBI**  
Senior Data Reviewer

**Ex. 4 - CBI**  
Senior Oversight Chemist

**To:** Colleen Walling  
ESAT Region 3 Project Officer

## **OVERVIEW**

Third party Case R33917, Project 480-16100-1, consisted of twenty (20) aqueous samples including three (3) field blanks analyzed for ethylene glycol. Samples were analyzed by TestAmerica Buffalo (TAL BUF) according to Test Methods for Evaluating Solid Waste SW-846 Method 8015B.

## **SUMMARY**

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage\_4\_Validation\_Manual). Areas of concern with respect to data usability are listed below.

## **MINOR PROBLEM**

- The laboratory employed a four (4) point calibration curve for the analysis of the compounds requested; however, Method 8015B specifies the use of a five (5) point curve. No action was taken by the reviewer based on this deviation from the method.

## **NOTES**

- Reported recoveries and Relative Percent Differences (RPDs) in Laboratory Control Sample (LCS) analyses and Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample HW44 were within control limits.
- The calibration factors calculated by the reviewer were slightly different than those calculated by the laboratory. Results calculated using these calibration factors were within rounding errors from laboratory and data validation results.

## **ATTACHMENTS**

Appendix A – Glossary of Data Qualifier Codes

Appendix B – Data Summary Form(s)

Appendix C – Chain of Custody Records

Appendix D – Laboratory Case Narrative

DCN: R33917\_480-16100-1

## **GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)**

### **CODES RELATED TO IDENTIFICATION**

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

### **CODES RELATED TO QUANTITATION**

(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

### **OTHER CODES**

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

## DATA SUMMARY FORM: Glycols

Page 1 of 1

CASE: R33917

PROJECT #: 480-16100-1

Number of Soil Samples : 0

Site :

DIMOCK

Number of Water Samples : 20

Lab. :

TALBUF

|                     |             |             |             |             |             |
|---------------------|-------------|-------------|-------------|-------------|-------------|
| Sample Number :     | FB12        | FB13        | FB14        | HW21        | HW21Z       |
| Sampling Location : | FB12        | FB13        | FB14        | HW21        | HW21        |
| Laboratory ID:      | 480-16100-1 | 480-16100-2 | 480-16100-3 | 480-16100-4 | 480-16100-5 |
| Field QC:           | Field Blank | Field Blank | Field Blank |             |             |
| Matrix :            | Water       | Water       | Water       | Water       | Water       |
| Units :             | mg/L        | mg/L        | mg/L        | mg/L        | mg/L        |
| Date Sampled :      | 2/07/2012   | 2/08/2012   | 2/09/2012   | 2/09/2012   | 2/09/2012   |
| Time Sampled :      | 13:35       | 09:00       | 13:36       | 10:53       | 10:53       |
| Dilution Factor :   | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         |
| Glycols             | RL          | Result      | Flag        | Result      | Flag        |
| Ethylene glycol     | 10          |             |             |             |             |

|                     |             |             |             |             |              |
|---------------------|-------------|-------------|-------------|-------------|--------------|
| Sample Number :     | HW22        | HW22-P      | HW23        | HW23-P      | HW38         |
| Sampling Location : | HW22        | HW22-P      | HW23        | HW23-P      | HW38         |
| Laboratory ID:      | 480-16100-6 | 480-16100-7 | 480-16100-8 | 480-16100-9 | 480-16100-10 |
| Field QC:           |             |             |             |             |              |
| Matrix :            | Water       | Water       | Water       | Water       | Water        |
| Units :             | mg/L        | mg/L        | mg/L        | mg/L        | mg/L         |
| Date Sampled :      | 2/09/2012   | 2/09/2012   | 2/08/2012   | 2/08/2012   | 2/08/2012    |
| Time Sampled :      | 10:42       | 10:50       | 15:42       | 15:39       | 10:41        |
| Dilution Factor :   | 1.0         | 1.0         | 1.0         | 1.0         | 1.0          |
| Glycols             | RL          | Result      | Flag        | Result      | Flag         |
| Ethylene glycol     | 10          |             |             |             |              |

|                     |              |              |              |              |              |
|---------------------|--------------|--------------|--------------|--------------|--------------|
| Sample Number :     | HW38-P       | HW44         | HW47         | HW47-P       | HW48         |
| Sampling Location : | HW38-P       | HW44         | HW47         | HW47-P       | HW48         |
| Laboratory ID:      | 480-16100-11 | 480-16100-12 | 480-16100-13 | 480-16100-14 | 480-16100-15 |
| Field QC:           |              |              |              |              |              |
| Matrix :            | Water        | Water        | Water        | Water        | Water        |
| Units :             | mg/L         | mg/L         | mg/L         | mg/L         | mg/L         |
| Date Sampled :      | 2/08/2012    | 2/09/2012    | 2/08/2012    | 2/08/2012    | 2/08/2012    |
| Time Sampled :      | 10:52        | 14:49        | 11:50        | 12:25        | 16:06        |
| Dilution Factor :   | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |
| Glycols             | RL           | Result       | Flag         | Result       | Flag         |
| Ethylene glycol     | 10           |              |              |              |              |

|                     |              |              |              |              |              |
|---------------------|--------------|--------------|--------------|--------------|--------------|
| Sample Number :     | HW48Z        | HW49         | HW49-P       | HW51         | HW51-P       |
| Sampling Location : | HW48         | HW49         | HW49-P       | HW51         | HW51-P       |
| Laboratory ID:      | 480-16100-16 | 480-16100-17 | 480-16100-18 | 480-16100-19 | 480-16100-20 |
| Field QC:           |              |              |              |              |              |
| Matrix :            | Water        | Water        | Water        | Water        | Water        |
| Units :             | mg/L         | mg/L         | mg/L         | mg/L         | mg/L         |
| Date Sampled :      | 2/08/2012    | 2/09/2012    | 2/09/2011    | 2/07/2012    | 2/07/2012    |
| Time Sampled :      | 16:06        | 14:11        | 14:26        | 13:48        | 13:56        |
| Dilution Factor :   | 1.0          | 1.0          | 1.0          | 1.0          | 1.0          |
| Glycols             | RL           | Result       | Flag         | Result       | Flag         |
| Ethylene glycol     | 10           |              |              |              |              |

RL = Reporting Limit

\*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL \* Dilution Factor)

Revised 09/99

## USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/13/2012

CarrierName: FedEx

AirbillNo: 7980 5367 6448

## CHAIN OF CUSTODY RECORD

Project Code: TL01-11-12-001

No: 3-021012-100338-0184

Lab: Test America DIM

Lab Contact:

Lab Phone: 716.504.9822

| Sample # | Matrix/Sampler                           | Coll. Method | Analysis/Turnaround   | Tag/Preservative/Bottles   | Station Location | Collected        | For Lab Use Only |
|----------|--|--------------|---|--|------------------|------------------|------------------|
| HW23     | Drinking Water/<br>Tom Sedlacek          | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4450 (-NA- / 40mlGlassVial),<br>4451 (-NA- / 40mlGlassVial)<br>(2)   | HW23             | 02/08/2012 15:42 |                  |
| HW23-P   | Drinking Water/<br>Dan Jacobsen          | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4476 (-NA- / 40mlGlassVial),<br>4477 (-NA- / 40mlGlassVial)<br>(2)   | HW23-P           | 02/08/2012 15:39 |                  |
| HW38     | Drinking Water/<br>Tom Sedlacek          | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4287 (-NA- / 40mlGlassVial),<br>4288 (-NA- / 40mlGlassVial)<br>(2)   | HW38             | 02/08/2012 10:41 |                  |
| HW38-P   | Drinking Water/<br>Dan Jacobsen          | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4321 (-NA- / 40mlGlassVial),<br>4322 (-NA- / 40mlGlassVial)<br>(2)   | HW38-P           | 02/08/2012 10:52 |                  |
| HW44     | Drinking Water/<br>Bryan Berna           | Grab         | EthyGlycol(7), EthyGlycol(7),<br>EthyGlycol(7), EthyGlycol(7) | 4828 (-NA- / 40mlGlassVial),<br>4829 (-NA- / 40mlGlassVial),<br>4843 (-NA- / 40mlGlassVial),<br>4844 (-NA- / 40mlGlassVial)<br>(4) | HW44             | 02/09/2012 14:49 |                  |
| HW47     | Drinking Water/<br>David Johnson         | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4356 (-NA- / 40mlGlassVial),<br>4357 (-NA- / 40mlGlassVial)<br>(2)   | HW47             | 02/08/2012 11:50 |                  |
| HW47-P   | Drinking Water/<br>Francisco<br>Lapostol | Grab         | EthyGlycol(7), EthyGlycol(7)                                  | 4390 (-NA- / 40mlGlassVial),<br>4391 (-NA- / 40mlGlassVial)<br>(2)   | HW47-P           | 02/08/2012 12:25 |                  |

Sample(s) to be used for Lab QC: HW44

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: EthyGlycol=17-Ethylene Glycol

| Items/Reason | Relinquished by | Date | Received by | Date    | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|--------------|-----------------|------|-------------|---------|------|--------------|-----------------|------|-------------|------|------|
| 7            | <i>D. Kelly</i> |      | <i>ALF</i>  | 2/14/12 | 1015 |              |                 |      |             |      |      |
|              |                 |      |             |         |      |              |                 |      |             |      |      |
|              |                 |      |             |         |      |              |                 |      |             |      |      |

2.7, 2.9  
#2

USEPA CLP Generic COC (LAB COPY)

DateShipped: 2/13/2012

CarrierName: FedEx

AirbillNo: 7980 5367 6448

CHAIN OF CUSTODY RECORD

Project Code: TL01-11-12-001

No: 3-021012-100338-0184

Lab: Test America DIM

Lab Contact:

Lab Phone: 716.504.9822

| Sample # | Matrix/Sampler                           | Coll. Method | Analysis/Turnaround          | Tag/Preservative/Bottles   | Station Location | Collected        | For Lab Use Only |
|----------|--|--------------|------------------------------|--|------------------|------------------|------------------|
| HW48     | Drinking Water/<br>David Johnson         | Grab         | EthyGlycol(7), EthyGlycol(7) | 4510 (-NA- / 40mlGlassVial),<br>4511 (-NA- / 40mlGlassVial)<br>(2) | HW48             | 02/08/2012 16:06 |                  |
| HW48z    | Drinking Water/<br>David Johnson         | Grab         | EthyGlycol(7), EthyGlycol(7) | 4544 (-NA- / 40mlGlassVial),<br>4545 (-NA- / 40mlGlassVial)<br>(2) | HW48             | 02/08/2012 16:06 |                  |
| HW49     | Drinking Water/<br>David Johnson         | Grab         | EthyGlycol(7), EthyGlycol(7) | 4734 (-NA- / 40mlGlassVial),<br>4735 (-NA- / 40mlGlassVial)<br>(2) | HW49             | 02/09/2012 14:11 |                  |
| HW49-P   | Drinking Water/<br>Francisco<br>Lapostol | Grab         | EthyGlycol(7), EthyGlycol(7) | 4760 (-NA- / 40mlGlassVial),<br>4761 (-NA- / 40mlGlassVial)<br>(2) | HW49-P           | 02/09/2012 14:26 |                  |
| HW51     | Drinking Water/<br>David Johnson         | Grab         | EthyGlycol(7), EthyGlycol(7) | 4117 (-NA- / 40mlGlassVial),<br>4118 (-NA- / 40mlGlassVial)<br>(2) | HW51             | 02/07/2012 13:48 |                  |
| HW51-P   | Drinking Water/<br>Francisco<br>Lapostol | Grab         | EthyGlycol(7), EthyGlycol(7) | 4153 (-NA- / 40mlGlassVial),<br>4154 (-NA- / 40mlGlassVial)<br>(2) | HW51-P           | 02/07/2012 13:56 |                  |
|          |  |              |                              |  |                  |                  |                  |
|          |  |              |                              |  |                  |                  |                  |
|          |  |              |                              |  |                  |                  |                  |
|          |  |              |                              |  |                  |                  |                  |

|   |   |
|---|---|
| Special Instructions:                       | Shipment for Case Complete? N               |
|   | Samples Transferred From Chain of Custody # |
| Analysis Key: EthyGlycol=17-Ethylene Glycol |   |

| Items/Reason | Relinquished by      | Date    | Received by | Date    | Time | Items/Reason | Relinquished By | Date | Received by | Date | Time |
|--------------|----------------------|---------|-------------|---------|------|--------------|-----------------|------|-------------|------|------|
| 6            | <i>David Johnson</i> | 2/13/12 | <i>CEJ</i>  | 2/14/12 | 1015 |              |                 |      |             |      |      |
|              |                      |         |             |         |      |              |                 |      |             |      |      |
|              |                      |         |             |         |      |              |                 |      |             |      |      |

2.7, 2.9  
42

## ANALYTICAL REPORT

Job Number: 480-16100-1

Job Description: TechLaw Project No. R33917 (EG only)

For:

Techlaw, Inc

2208 Warwood Ave.

Wheeling, WV 26003-6546

Attention: Mr. Gene Nance



Approved for release  
Brian Fischer  
Project Manager II  
2/21/2012 11:49 AM

Brian Fischer

Project Manager II

brian.fischer@testamericainc.com

02/21/2012

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 [www.testamericainc.com](http://www.testamericainc.com)





## GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.:

Instrument ID: PE-01 Analysis Batch Number: 49964

Lab Sample ID: STD 480-49964/6 IC Client Sample ID:

Date Analyzed: 02/01/12 11:32 Lab File ID: PE08206.d GC Column: ZB-5 ID: 0.25 (mm)

| COMPOUND NAME   | RETENTION<br>TIME | MANUAL INTEGRATION |         |                |
|-----------------|-------------------|--------------------|---------|----------------|
|                 |                   | REASON             | ANALYST | DATE           |
| 2-Ethoxyethanol | 2.08              | Peak Tail          | dosierc | 02/01/12 13:24 |

Lab Sample ID: STD 480-49964/7 IC Client Sample ID:

Date Analyzed: 02/01/12 11:49 Lab File ID: PE08207.d GC Column: ZB-5 ID: 0.25 (mm)

| COMPOUND NAME   | RETENTION<br>TIME | MANUAL INTEGRATION |         |                |
|-----------------|-------------------|--------------------|---------|----------------|
|                 |                   | REASON             | ANALYST | DATE           |
| 2-Ethoxyethanol | 2.07              | Peak Tail          | dosierc | 02/01/12 13:25 |

Lab Sample ID: STD 480-49964/8 IC Client Sample ID:

Date Analyzed: 02/01/12 12:06 Lab File ID: PE08208.d GC Column: ZB-5 ID: 0.25 (mm)

| COMPOUND NAME    | RETENTION<br>TIME | MANUAL INTEGRATION     |         |                |
|------------------|-------------------|------------------------|---------|----------------|
|                  |                   | REASON                 | ANALYST | DATE           |
| 2-Methoxyethanol | 1.91              | Incomplete Integration | dosierc | 02/01/12 13:27 |
| 2-Ethoxyethanol  | 2.07              | Peak Tail              | dosierc | 02/01/12 13:27 |

8015B

## METHOD SUMMARY

Client: Techlaw, Inc

Job Number: 480-16100-1

| Description                          |       | Lab Location | Method      | Preparation Method |
|--------------------------------------|-------|--------------|-------------|--------------------|
| Matrix                               | Water |              |             |                    |
| Glycols -Direct Injection (GC/FID)   |       | TAL BUF      | SW846 8015B |                    |
| 8015 Direct Injection Prep (Aqueous) |       | TAL BUF      |             | SW846 8015 Prep    |

### Lab References:

TAL BUF = TestAmerica Buffalo

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## **ATTACHMENT 2**

## **Appendix A**

Form Is

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: FB12 Lab Sample ID: 480-16100-1  
Matrix: Water Lab File ID: PE09186.d  
Analysis Method: 8015B Date Collected: 02/07/2012 13:35  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:00  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 108  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: FB13 Lab Sample ID: 480-16100-2  
 Matrix: Water Lab File ID: PE09187.d  
 Analysis Method: 8015B Date Collected: 02/08/2012 09:00  
 Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:17  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 104  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: FB14 Lab Sample ID: 480-16100-3  
 Matrix: Water Lab File ID: PE09188.d  
 Analysis Method: 8015B Date Collected: 02/09/2012 13:36  
 Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:34  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 111  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW21 Lab Sample ID: 480-16100-4  
Matrix: Water Lab File ID: PE09189.d  
Analysis Method: 8015B Date Collected: 02/09/2012 10:53  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 11:52  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 100  |   | 66-130 |



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW21Z Lab Sample ID: 480-16100-5  
Matrix: Water Lab File ID: PE09190.d  
Analysis Method: 8015B Date Collected: 02/09/2012 10:53  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 12:09  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 113  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW22 Lab Sample ID: 480-16100-6  
Matrix: Water Lab File ID: PE09191.d  
Analysis Method: 8015B Date Collected: 02/09/2012 10:42  
Sample wt/vol: 0.5 (mL) Date Analyzed: 02/15/2012 12:26  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 103  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW22-P Lab Sample ID: 480-16100-7  
Matrix: Water Lab File ID: PE09192.d  
Analysis Method: 8015B Date Collected: 02/09/2012 10:50  
Sample wt/vol: 0.5 (mL) Date Analyzed: 02/15/2012 12:43  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 108  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW23 Lab Sample ID: 480-16100-8  
Matrix: Water Lab File ID: PE09193.d  
Analysis Method: 8015B Date Collected: 02/08/2012 15:42  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 13:01  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 102  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW23-P Lab Sample ID: 480-16100-9  
Matrix: Water Lab File ID: PE09195.d  
Analysis Method: 8015B Date Collected: 02/08/2012 15:39  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 13:35  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 110  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Client Sample ID: HW38

Lab Sample ID: 480-16100-10

Matrix: Water

Lab File ID: PE09196.d

Analysis Method: 8015B

Date Collected: 02/08/2012 10:41

Sample wt/vol: 0.5(mL)

Date Analyzed: 02/15/2012 13:53

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: ZB-5 ID: 0.25(mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 51671

Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 105  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Client Sample ID: HW38-P

Lab Sample ID: 480-16100-11

Matrix: Water

Lab File ID: PE09197.d

Analysis Method: 8015B

Date Collected: 02/08/2012 10:52

Sample wt/vol: 0.5(mL)

Date Analyzed: 02/15/2012 14:10

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: ZB-5 ID: 0.25(mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 51671

Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 108  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW44 Lab Sample ID: 480-16100-12  
Matrix: Water Lab File ID: PE09198.d  
Analysis Method: 8015B Date Collected: 02/09/2012 14:49  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 14:27  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 103  |   | 66-130 |



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW47 Lab Sample ID: 480-16100-13  
Matrix: Water Lab File ID: PE09201.d  
Analysis Method: 8015B Date Collected: 02/08/2012 11:50  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 15:19  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 109  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW47-P Lab Sample ID: 480-16100-14  
Matrix: Water Lab File ID: PE09202.d  
Analysis Method: 8015B Date Collected: 02/08/2012 12:25  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 15:36  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 106  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW48 Lab Sample ID: 480-16100-15  
Matrix: Water Lab File ID: PE09203.d  
Analysis Method: 8015B Date Collected: 02/08/2012 16:06  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 15:54  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 110  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW48Z Lab Sample ID: 480-16100-16  
Matrix: Water Lab File ID: PE09204.d  
Analysis Method: 8015B Date Collected: 02/08/2012 16:06  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 16:11  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC |  | LIMITS |
|----------|----------------|------|--|--------|
| 110-63-4 | 1,4-Butanediol | 105  |  | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Client Sample ID: HW49

Lab Sample ID: 480-16100-17

Matrix: Water

Lab File ID: PE09206.d

Analysis Method: 8015B

Date Collected: 02/09/2012 14:11

Sample wt/vol: 0.5 (mL)

Date Analyzed: 02/15/2012 16:46

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: ZB-5 ID: 0.25 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 51671

Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 106  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Client Sample ID: HW49-P

Lab Sample ID: 480-16100-18

Matrix: Water

Lab File ID: PE09207.d

Analysis Method: 8015B

Date Collected: 02/09/2012 14:26

Sample wt/vol: 0.5(mL)

Date Analyzed: 02/15/2012 17:03

Soil Aliquot Vol: \_\_\_\_\_

Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_

GC Column: ZB-5 ID: 0.25(mm)

% Moisture: \_\_\_\_\_

Level: (low/med) Low

Analysis Batch No.: 51671

Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 106  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW51 Lab Sample ID: 480-16100-19  
Matrix: Water Lab File ID: PE09227.d  
Analysis Method: 8015B Date Collected: 02/07/2012 13:48  
Sample wt/vol: .5(mL) Date Analyzed: 02/17/2012 09:59  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51962 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 102  |   | 66-130 |

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW51-P Lab Sample ID: 480-16100-20  
Matrix: Water Lab File ID: PE09228.d  
Analysis Method: 8015B Date Collected: 02/07/2012 13:56  
Sample wt/vol: .5(mL) Date Analyzed: 02/17/2012 10:17  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51962 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 109  |   | 66-130 |



## **Appendix B**

### **Support Documentation**

FORM VI  
GC VOA INITIAL CALIBRATION DATA  
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 Analy Batch No.: 49964  
SDG No.: \_\_\_\_\_  
Instrument ID: PE-01 GC Column: ZB-5 ID: 0.25 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 02/01/2012 10:57 Calibration End Date: 02/01/2012 12:06 Calibration ID: 5852

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:  | LAB FILE ID: |
|---------|-----------------|--------------|
| Level 1 | STD 480-49964/5 | PE08205.d    |
| Level 2 | STD 480-49964/6 | PE08206.d    |
| Level 3 | STD 480-49964/7 | PE08207.d    |
| Level 4 | STD 480-49964/8 | PE08208.d    |

| ANALYTE            | LVL 1 | LVL 2 | LVL 3 | LVL 4 |  |  |  |  |  |  | RT WINDOW     | AVG RT |
|--------------------|-------|-------|-------|-------|--|--|--|--|--|--|---------------|--------|
| 2-Methoxyethanol   | 1.904 | 1.920 | 1.912 | 1.907 |  |  |  |  |  |  | 1.870 - 1.970 | 1.911  |
| 2-Ethoxyethanol    | 2.067 | 2.083 | 2.073 | 2.068 |  |  |  |  |  |  | 2.033 - 2.133 | 2.073  |
| Propylene glycol   | 4.515 | 4.524 | 4.519 | 4.523 |  |  |  |  |  |  | 4.474 - 4.574 | 4.520  |
| Ethylene glycol    | 4.771 | 4.780 | 4.773 | 4.779 |  |  |  |  |  |  | 4.730 - 4.830 | 4.776  |
| 2,2'-Oxybisethanol | 7.180 | 7.188 | 7.179 | 7.187 |  |  |  |  |  |  | 7.138 - 7.238 | 7.184  |
| Triethylene Glycol | 8.828 | 8.833 | 8.827 | 8.833 |  |  |  |  |  |  | 8.783 - 8.883 | 8.830  |
| 1,4-Butanediol     | 6.829 | 6.839 | 6.831 | 6.837 |  |  |  |  |  |  | 6.789 - 6.889 | 6.834  |

FORM VI  
GC VOA INITIAL CALIBRATION DATA  
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 Analy Batch No.: 49964

SDG No.:

Instrument ID: PE-01 GC Column: ZB-5 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/01/2012 10:57 Calibration End Date: 02/01/2012 12:06 Calibration ID: 5852

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:  | LAB FILE ID: |
|---------|-----------------|--------------|
| Level 1 | STD 480-49964/5 | PE08205.d    |
| Level 2 | STD 480-49964/6 | PE08206.d    |
| Level 3 | STD 480-49964/7 | PE08207.d    |
| Level 4 | STD 480-49964/8 | PE08208.d    |

| ANALYTE            | CF     |        |        |        | CURVE<br>TYPE | COEFFICIENT |            |    | # | MIN CF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|--------------------|--------|--------|--------|--------|---------------|-------------|------------|----|---|--------|------|---|-------------|---------------|---|-------------------|
|                    | LVL 1  | LVL 2  | LVL 3  | LVL 4  |               | B           | M1         | M2 |   |        |      |   |             |               |   |                   |
| 2-Methoxyethanol   | 563452 | 596737 | 595761 | 513714 | Ave           |             | 571859.509 |    |   |        | 6.2  |   | 20.0        |               |   |                   |
| 2-Ethoxyethanol    | 751570 | 792686 | 787469 | 694526 | Ave           |             | 760510.780 |    |   |        | 5.3  |   | 20.0        |               |   |                   |
| Propylene glycol   | 617951 | 671784 | 682739 | 601502 | Ave           |             | 643217.933 |    |   |        | 5.4  |   | 20.0        |               |   |                   |
| Ethylene glycol    | 459250 | 498692 | 513964 | 454783 | Ave           |             | 480568.287 |    |   |        | 5.3  |   | 20.0        |               |   |                   |
| 2,2'-Oxybisethanol | 548106 | 538716 | 560304 | 500903 | Ave           |             | 540870.511 |    |   |        | 4.4  |   | 20.0        |               |   |                   |
| Triethylene Glycol | 362706 | 305218 | 329041 | 307007 | Ave           |             | 350933.990 |    |   |        | 17.0 |   | 20.0        |               |   |                   |
| 1,4-Butanediol     | 913252 | 977122 | 967058 | 853325 | Ave           |             | 917742.130 |    |   |        | 5.9  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
GC VOA INITIAL CALIBRATION DATA  
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1 Analy Batch No.: 49964

SDG No.: \_\_\_\_\_

Instrument ID: PE-01 GC Column: ZB-5 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/01/2012 10:57 Calibration End Date: 02/01/2012 12:06 Calibration ID: 5852

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:  | LAB FILE ID: |
|---------|-----------------|--------------|
| Level 1 | STD 480-49964/5 | PE08205.d    |
| Level 2 | STD 480-49964/6 | PE08206.d    |
| Level 3 | STD 480-49964/7 | PE08207.d    |
| Level 4 | STD 480-49964/8 | PE08208.d    |

| ANALYTE            | CURVE TYPE | RESPONSE |          |          |          |  | CONCENTRATION (NG/UL) |       |       |       |  |
|--------------------|------------|----------|----------|----------|----------|--|-----------------------|-------|-------|-------|--|
|                    |            | LVL 1    | LVL 2    | LVL 3    | LVL 4    |  | LVL 1                 | LVL 2 | LVL 3 | LVL 4 |  |
| 2-Methoxyethanol   | Ave        | 5634515  | 11934735 | 23830431 | 25685716 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| 2-Ethoxyethanol    | Ave        | 7515699  | 15853713 | 31498762 | 34726285 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| Propylene glycol   | Ave        | 6179509  | 13435683 | 27309567 | 30075112 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| Ethylene glycol    | Ave        | 4592495  | 9973849  | 20558557 | 22739168 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| 2,2'-Oxybisethanol | Ave        | 5481057  | 10774329 | 22412169 | 25045139 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| Triethylene Glycol | Ave        | 3627055  | 6104360  | 13161638 | 15350365 |  | 10.0                  | 20.0  | 40.0  | 50.0  |  |
| 1,4-Butanediol     | Ave        | 36530103 | 48856122 | 58023475 | 68266023 |  | 40.0                  | 50.0  | 60.0  | 80.0  |  |

Curve Type Legend:

Ave = Average

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 480-51671/2

Calibration Date: 02/15/2012 09:45

Instrument ID: PE-01

Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25 (mm)

Calib End Date: 02/01/2012 12:06

Lab File ID: PE09183.d

Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D    | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|-------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 651176 |        | 22.8           | 20.0            | 13.9  | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 863288 |        | 22.7           | 20.0            | 13.5  | 20.0      |
| Propylene glycol   | Ave           | 643218 | 696106 |        | 21.6           | 20.0            | 8.2   | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 498317 |        | 20.7           | 20.0            | 3.7   | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 338384 |        | 12.5           | 20.0            | -37.4 | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 79713  |        | 4.54           | 20.0            | -77.3 | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 887402 |        | 48.3           | 50.0            | -3.3  | 20.0      |

*NTC = non target compound*

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 480-51671/2 Calibration Date: 02/15/2012 09:45  
Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
Lab File ID: PE09183.d Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.92 | 1.87      | 1.97 |
| 2-Ethoxyethanol    | 2.07 | 2.02      | 2.12 |
| Propylene glycol   | 4.52 | 4.47      | 4.57 |
| Ethylene glycol    | 4.78 | 4.73      | 4.83 |
| 2,2'-Oxybisethanol | 7.18 | 7.13      | 7.23 |
| Triethylene Glycol | 8.84 | 8.79      | 8.89 |
| 1,4-Butanediol     | 6.83 | 6.78      | 6.88 |

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 480-51671/13

Calibration Date: 02/15/2012 13:18

Instrument ID: PE-01

Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25 (mm)

Calib End Date: 02/01/2012 12:06

Lab File ID: PE09194.d

Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|--------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 660012 |        | 23.1           | 20.0            | 15.4   | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 875533 |        | 23.0           | 20.0            | 15.1   | 20.0      |
| Propylene glycol   | Ave           | 643218 | 729182 |        | 22.7           | 20.0            | 13.4   | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 529022 |        | 22.0           | 20.0            | 10.1   | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 463944 |        | 17.2           | 20.0            | -14.2  | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 162630 |        | 9.27           | 20.0            | -53.7* | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 964817 |        | 52.6           | 50.0            | 5.1    | 20.0      |

*mt*

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 480-51671/13 Calibration Date: 02/15/2012 13:18  
 Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
 GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
 Lab File ID: PE09194.d Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.92 | 1.87      | 1.97 |
| 2-Ethoxyethanol    | 2.08 | 2.03      | 2.13 |
| Propylene glycol   | 4.52 | 4.47      | 4.57 |
| Ethylene glycol    | 4.77 | 4.72      | 4.82 |
| 2,2'-Oxybisethanol | 7.18 | 7.13      | 7.23 |
| Triethylene Glycol | 8.84 | 8.79      | 8.89 |
| 1,4-Butanediol     | 6.83 | 6.78      | 6.88 |



FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 480-51671/24 Calibration Date: 02/15/2012 16:28  
 Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
 GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
 Lab File ID: PE09205.d Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|--------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 654310 |        | 22.9           | 20.0            | 14.4   | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 869251 |        | 22.9           | 20.0            | 14.3   | 20.0      |
| Propylene glycol   | Ave           | 643218 | 727630 |        | 22.6           | 20.0            | 13.1   | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 538536 |        | 22.4           | 20.0            | 12.1   | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 439873 |        | 16.3           | 20.0            | -18.7  | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 111995 |        | 6.38           | 20.0            | -68.1* | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 983190 |        | 53.6           | 50.0            | 7.1    | 20.0      |

*mtc*

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 480-51671/24

Calibration Date: 02/15/2012 16:28

Instrument ID: PE-01

Calib Start Date: 02/01/2012 10:57

GC Column: ZB-5 ID: 0.25 (mm)

Calib End Date: 02/01/2012 12:06

Lab File ID: PE09205.d

Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.91 | 1.86      | 1.96 |
| 2-Ethoxyethanol    | 2.07 | 2.02      | 2.12 |
| Propylene glycol   | 4.52 | 4.47      | 4.57 |
| Ethylene glycol    | 4.78 | 4.73      | 4.83 |
| 2,2'-Oxybisethanol | 7.18 | 7.13      | 7.23 |
| Triethylene Glycol | 8.83 | 8.78      | 8.88 |
| 1,4-Butanediol     | 6.83 | 6.78      | 6.88 |

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 480-51671/27 Calibration Date: 02/15/2012 17:20  
Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
Lab File ID: PE09208.d Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|--------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 665583 |        | 23.3           | 20.0            | 16.4   | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 884057 |        | 23.2           | 20.0            | 16.2   | 20.0      |
| Propylene glycol   | Ave           | 643218 | 741537 |        | 23.1           | 20.0            | 15.3   | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 545151 |        | 22.7           | 20.0            | 13.4   | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 516044 |        | 19.1           | 20.0            | -4.6   | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 243331 |        | 13.9           | 20.0            | -30.7* | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 962915 |        | 52.5           | 50.0            | 4.9    | 20.0      |

MC

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 480-51671/27 Calibration Date: 02/15/2012 17:20  
Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
Lab File ID: PE09208.d Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.92 | 1.87      | 1.97 |
| 2-Ethoxyethanol    | 2.08 | 2.03      | 2.13 |
| Propylene glycol   | 4.52 | 4.47      | 4.57 |
| Ethylene glycol    | 4.78 | 4.73      | 4.83 |
| 2,2'-Oxybisethanol | 7.18 | 7.13      | 7.23 |
| Triethylene Glycol | 8.84 | 8.79      | 8.89 |
| 1,4-Butanediol     | 6.84 | 6.79      | 6.89 |

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 480-51962/3 Calibration Date: 02/17/2012 08:17  
 Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
 GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
 Lab File ID: PE09224.d Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|--------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 664669 |        | 23.2           | 20.0            | 16.2   | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 893385 |        | 23.5           | 20.0            | 17.5   | 20.0      |
| Propylene glycol   | Ave           | 643218 | 732179 |        | 22.8           | 20.0            | 13.8   | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 537733 |        | 22.4           | 20.0            | 11.9   | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 566183 |        | 20.9           | 20.0            | 4.7    | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 271488 |        | 15.5           | 20.0            | -22.6* | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 923292 |        | 50.3           | 50.0            | 0.6    | 20.0      |

*W/C*

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 480-51962/3 Calibration Date: 02/17/2012 08:17  
Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
Lab File ID: PE09224.d Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.91 | 1.86      | 1.96 |
| 2-Ethoxyethanol    | 2.07 | 2.02      | 2.12 |
| Propylene glycol   | 4.51 | 4.46      | 4.56 |
| Ethylene glycol    | 4.77 | 4.72      | 4.82 |
| 2,2'-Oxybisethanol | 7.17 | 7.12      | 7.22 |
| Triethylene Glycol | 8.83 | 8.78      | 8.88 |
| 1,4-Butanediol     | 6.82 | 6.77      | 6.87 |

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 480-51962/14 Calibration Date: 02/17/2012 12:18  
 Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
 GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
 Lab File ID: PE09235.d Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE            | CURVE<br>TYPE | AVE CF | CF     | MIN CF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D    | MAX<br>%D |
|--------------------|---------------|--------|--------|--------|----------------|-----------------|-------|-----------|
| 2-Methoxyethanol   | Ave           | 571860 | 666993 |        | 23.3           | 20.0            | 16.6  | 20.0      |
| 2-Ethoxyethanol    | Ave           | 760511 | 894740 |        | 23.5           | 20.0            | 17.6  | 20.0      |
| Propylene glycol   | Ave           | 643218 | 746011 |        | 23.2           | 20.0            | 16.0  | 20.0      |
| Ethylene glycol    | Ave           | 480568 | 552710 |        | 23.0           | 20.0            | 15.0  | 20.0      |
| 2,2'-Oxybisethanol | Ave           | 540871 | 603813 |        | 22.3           | 20.0            | 11.6  | 20.0      |
| Triethylene Glycol | Ave           | 350934 | 313129 |        | 17.8           | 20.0            | -10.8 | 20.0      |
| 1,4-Butanediol     | Ave           | 917742 | 947260 |        | 51.6           | 50.0            | 3.2   | 20.0      |

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 480-51962/14 Calibration Date: 02/17/2012 12:18  
Instrument ID: PE-01 Calib Start Date: 02/01/2012 10:57  
GC Column: ZB-5 ID: 0.25 (mm) Calib End Date: 02/01/2012 12:06  
Lab File ID: PE09235.d Heated Purge: (Y/N) N

| Analyte            | RT   | RT WINDOW |      |
|--------------------|------|-----------|------|
|                    |      | TO        | FROM |
| 2-Methoxyethanol   | 1.91 | 1.86      | 1.96 |
| 2-Ethoxyethanol    | 2.07 | 2.02      | 2.12 |
| Propylene glycol   | 4.51 | 4.46      | 4.56 |
| Ethylene glycol    | 4.77 | 4.72      | 4.82 |
| 2,2'-Oxybisethanol | 7.17 | 7.12      | 7.22 |
| Triethylene Glycol | 8.83 | 8.78      | 8.88 |
| 1,4-Butanediol     | 6.82 | 6.77      | 6.87 |



## GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Instrument ID: PE-01

Start Date: 02/01/2012 10:57

Analysis Batch Number: 49964

End Date: 02/01/2012 19:02

| LAB SAMPLE ID      | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID      |
|--------------------|------------------|------------------|--------------------|-------------|----------------|
| ZZZZZ              |                  | 02/01/2012 10:57 | 1                  |             | ZB-5 0.25 (mm) |
| STD 480-49964/5 IC |                  | 02/01/2012 11:15 | 1                  | PE08205.d   | ZB-5 0.25 (mm) |
| STD 480-49964/6 IC |                  | 02/01/2012 11:32 | 1                  | PE08206.d   | ZB-5 0.25 (mm) |
| STD 480-49964/7 IC |                  | 02/01/2012 11:49 | 1                  | PE08207.d   | ZB-5 0.25 (mm) |
| STD 480-49964/8 IC |                  | 02/01/2012 12:06 | 1                  | PE08208.d   | ZB-5 0.25 (mm) |
| ICV 480-49964/9    |                  | 02/01/2012 12:24 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 13:43 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 14:11 | 1                  |             | ZB-5 0.25 (mm) |
| ICV 480-49964/12   |                  | 02/01/2012 14:48 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-49964/13   |                  | 02/01/2012 15:52 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 16:09 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 16:26 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 16:44 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 17:01 | 1                  |             | ZB-5 0.25 (mm) |
| MDLV 480-49832/5-A |                  | 02/01/2012 17:18 | 1                  |             | ZB-5 0.25 (mm) |
| MDLV 480-49832/6-A |                  | 02/01/2012 17:36 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ              |                  | 02/01/2012 17:53 | 50                 |             | ZB-5 0.25 (mm) |
|                    |                  | 02/01/2012 18:10 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-49964/24   |                  | 02/01/2012 19:02 | 1                  |             | ZB-5 0.25 (mm) |

## GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Instrument ID: PE-01

Start Date: 02/15/2012 09:45

Analysis Batch Number: 51671

End Date: 02/15/2012 17:20

| LAB SAMPLE ID     | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID      |
|-------------------|------------------|------------------|--------------------|-------------|----------------|
| CCV 480-51671/2   |                  | 02/15/2012 09:45 | 1                  | PE09183.d   | ZB-5 0.25 (mm) |
| MB 480-51622/1-A  |                  | 02/15/2012 10:25 | 1                  | PE09184.d   | ZB-5 0.25 (mm) |
| LCS 480-51622/2-A |                  | 02/15/2012 10:42 | 1                  | PE09185.d   | ZB-5 0.25 (mm) |
| 480-16100-1       | FB12             | 02/15/2012 11:00 | 1                  | PE09186.d   | ZB-5 0.25 (mm) |
| 480-16100-2       | FB13             | 02/15/2012 11:17 | 1                  | PE09187.d   | ZB-5 0.25 (mm) |
| 480-16100-3       | FB14             | 02/15/2012 11:34 | 1                  | PE09188.d   | ZB-5 0.25 (mm) |
| 480-16100-4       | HW21             | 02/15/2012 11:52 | 1                  | PE09189.d   | ZB-5 0.25 (mm) |
| 480-16100-5       | HW212            | 02/15/2012 12:09 | 1                  | PE09190.d   | ZB-5 0.25 (mm) |
| 480-16100-6       | HW22             | 02/15/2012 12:26 | 1                  | PE09191.d   | ZB-5 0.25 (mm) |
| 480-16100-7       | HW22-P           | 02/15/2012 12:43 | 1                  | PE09192.d   | ZB-5 0.25 (mm) |
| 480-16100-8       | HW23             | 02/15/2012 13:01 | 1                  | PE09193.d   | ZB-5 0.25 (mm) |
| CCV 480-51671/13  |                  | 02/15/2012 13:18 | 1                  | PE09194.d   | ZB-5 0.25 (mm) |
| 480-16100-9       | HW23-P           | 02/15/2012 13:35 | 1                  | PE09195.d   | ZB-5 0.25 (mm) |
| 480-16100-10      | HW38             | 02/15/2012 13:53 | 1                  | PE09196.d   | ZB-5 0.25 (mm) |
| 480-16100-11      | HW38-P           | 02/15/2012 14:10 | 1                  | PE09197.d   | ZB-5 0.25 (mm) |
| 480-16100-12      | HW44             | 02/15/2012 14:27 | 1                  | PE09198.d   | ZB-5 0.25 (mm) |
| 480-16100-12 MS   | HW44 MS          | 02/15/2012 14:45 | 1                  | PE09199.d   | ZB-5 0.25 (mm) |
| 480-16100-12 MSD  | HW44 MSD         | 02/15/2012 15:02 | 1                  | PE09200.d   | ZB-5 0.25 (mm) |
| 480-16100-13      | HW47             | 02/15/2012 15:19 | 1                  | PE09201.d   | ZB-5 0.25 (mm) |
| 480-16100-14      | HW47-P           | 02/15/2012 15:36 | 1                  | PE09202.d   | ZB-5 0.25 (mm) |
| 480-16100-15      | HW48             | 02/15/2012 15:54 | 1                  | PE09203.d   | ZB-5 0.25 (mm) |
| 480-16100-16      | HW48Z            | 02/15/2012 16:11 | 1                  | PE09204.d   | ZB-5 0.25 (mm) |
| CCV 480-51671/24  |                  | 02/15/2012 16:28 | 1                  | PE09205.d   | ZB-5 0.25 (mm) |
| 480-16100-17      | HW49             | 02/15/2012 16:46 | 1                  | PE09206.d   | ZB-5 0.25 (mm) |
| 480-16100-18      | HW49-P           | 02/15/2012 17:03 | 1                  | PE09207.d   | ZB-5 0.25 (mm) |
| CCV 480-51671/27  |                  | 02/15/2012 17:20 | 1                  | PE09208.d   | ZB-5 0.25 (mm) |

## GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Instrument ID: PE-01

Start Date: 02/17/2012 08:17

Analysis Batch Number: 51962

End Date: 02/17/2012 20:23

| LAB SAMPLE ID     | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID      |
|-------------------|------------------|------------------|--------------------|-------------|----------------|
| CCV 480-51962/3   |                  | 02/17/2012 08:17 | 1                  | PE09224.d   | ZB-5 0.25 (mm) |
| MB 480-51944/1-A  |                  | 02/17/2012 08:57 | 1                  | PE09225.d   | ZB-5 0.25 (mm) |
| LCS 480-51944/2-A |                  | 02/17/2012 09:14 | 1                  | PE09226.d   | ZB-5 0.25 (mm) |
| 480-16100-19      | HW51             | 02/17/2012 09:59 | 1                  | PE09227.d   | ZB-5 0.25 (mm) |
| 480-16100-20      | HW51-P           | 02/17/2012 10:17 | 1                  | PE09228.d   | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 10:34 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 10:51 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 11:09 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 11:26 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 11:43 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 12:01 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-51962/14  |                  | 02/17/2012 12:18 | 1                  | PE09235.d   | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 12:35 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 12:53 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 13:10 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 13:27 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 13:45 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 14:02 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 14:19 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 14:37 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-51962/23  |                  | 02/17/2012 14:54 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 15:11 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 15:29 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 15:46 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 16:03 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 16:20 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 16:38 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 16:55 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 17:12 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 17:30 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 17:47 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-51962/34  |                  | 02/17/2012 18:04 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 18:21 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 18:39 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 18:56 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 19:13 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 19:31 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 19:48 | 1                  |             | ZB-5 0.25 (mm) |
| ZZZZZ             |                  | 02/17/2012 20:05 | 1                  |             | ZB-5 0.25 (mm) |
| CCV 480-51962/42  |                  | 02/17/2012 20:23 | 1                  |             | ZB-5 0.25 (mm) |

8015B

FORM II  
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

GC Column (1): ZB-5

ID: 0.25 (mm)

| Client Sample ID | Lab Sample ID        | 14BD1 # |
|------------------|----------------------|---------|
| FB12             | 480-16100-1          | 108     |
| FB13             | 480-16100-2          | 104     |
| FB14             | 480-16100-3          | 111     |
| HW21             | 480-16100-4          | 100     |
| HW21Z            | 480-16100-5          | 113     |
| HW22             | 480-16100-6          | 103     |
| HW22-P           | 480-16100-7          | 108     |
| HW23             | 480-16100-8          | 102     |
| HW23-P           | 480-16100-9          | 110     |
| HW38             | 480-16100-10         | 105     |
| HW38-P           | 480-16100-11         | 108     |
| HW44             | 480-16100-12         | 103     |
| HW47             | 480-16100-13         | 109     |
| HW47-P           | 480-16100-14         | 106     |
| HW48             | 480-16100-15         | 110     |
| HW48Z            | 480-16100-16         | 105     |
| HW49             | 480-16100-17         | 106     |
| HW49-P           | 480-16100-18         | 106     |
| HW51             | 480-16100-19         | 102     |
| HW51-P           | 480-16100-20         | 109     |
|                  | MB 480-51622/1-A     | 107     |
|                  | MB 480-51944/1-A     | 100     |
|                  | LCS<br>480-51622/2-A | 110     |
|                  | LCS<br>480-51944/2-A | 101     |
| HW44 MS          | 480-16100-12 MS      | 111     |
| HW44 MSD         | 480-16100-12 MSD     | 109     |

14BD = 1,4-Butanediol

QC LIMITS  
66-130

# Column to be used to flag recovery values

FORM II 8015B

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Batch Number: 51622

Batch Start Date: 02/15/12 07:17

Batch Analyst: Neary, Mary Ann

Batch Method: 8015 Prep

Batch End Date:

| Lab Sample ID         | Client Sample ID | Method Chain        | Basis | InitialAmount | FinalAmount | GLY_CCV_1000<br>00014 | GLY_SURR1000<br>00016 |  |  |
|-----------------------|------------------|---------------------|-------|---------------|-------------|-----------------------|-----------------------|--|--|
| MB 480-51622/1        |                  | 8015 Prep,<br>8015B |       | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| LCS 480-51622/2       |                  | 8015 Prep,<br>8015B |       | 0.5 mL        | 1 mL        | 10 uL                 | 50 uL                 |  |  |
| 480-16100-A-1         | FB12             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-2         | FB13             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-3         | FB14             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-4         | HW21             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-5         | HW21Z            | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-6         | HW22             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-7         | HW22-P           | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-8         | HW23             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-9         | HW23-P           | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-10        | HW38             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-11        | HW38-P           | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-12        | HW44             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-12<br>MS  | HW44             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        | 10 uL                 | 50 uL                 |  |  |
| 480-16100-A-12<br>MSD | HW44             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        | 10 uL                 | 50 uL                 |  |  |
| 480-16100-A-13        | HW47             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-14        | HW47-P           | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-15        | HW48             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-16        | HW48Z            | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-17        | HW49             | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-B-18        | HW49-P           | 8015 Prep,<br>8015B | T     | 0.5 mL        | 1 mL        |                       | 50 uL                 |  |  |

8015B

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Batch Number: 51622 Batch Start Date: 02/15/12 07:17 Batch Analyst: Neary, Mary Ann

Batch Method: 8015 Prep Batch End Date: \_\_\_\_\_

| Batch Notes         |       |
|---------------------|-------|
| Methanol Lot Number | de997 |

| Basis | Basis Description |
|-------|-------------------|
| T     | Total/NA          |

GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Batch Number: 51944

Batch Start Date: 02/17/12 06:50

Batch Analyst: Neary, Mary Ann

Batch Method: 8015 Prep

Batch End Date: \_\_\_\_\_

| Lab Sample ID   | Client Sample ID | Method Chain        | Basis | InitialAmount | FinalAmount | GLY_CCW_1000<br>00014 | GLY_SURR1000<br>00016 |  |  |
|-----------------|------------------|---------------------|-------|---------------|-------------|-----------------------|-----------------------|--|--|
| MB 480-51944/1  |                  | 8015 Prep,<br>8015B |       | .5 mL         | 1 mL        |                       | 50 uL                 |  |  |
| LCS 480-51944/2 |                  | 8015 Prep,<br>8015B |       | .5 mL         | 1 mL        | 10 uL                 | 50 uL                 |  |  |
| 480-16100-A-19  | HW51             | 8015 Prep,<br>8015B | T     | .5 mL         | 1 mL        |                       | 50 uL                 |  |  |
| 480-16100-A-20  | HW51-P           | 8015 Prep,<br>8015B | T     | .5 mL         | 1 mL        |                       | 50 uL                 |  |  |

Batch Notes

Methanol Lot Number

de997

| Basis | Basis Description |
|-------|-------------------|
| T     | Total/NA          |

8015B

FORM IV  
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: MB 480-51622/1-A  
 Matrix: Water Date Extracted: 02/15/2012 07:17  
 Lab File ID: (1) PE09184.d Lab File ID: (2) \_\_\_\_\_  
 Date Analyzed: (1) 02/15/2012 10:25 Date Analyzed: (2) \_\_\_\_\_  
 Instrument ID: (1) PE-01 Instrument ID: (2) \_\_\_\_\_  
 GC Column: (1) ZB-5 ID: 0.25 (mm) GC Column: (2) \_\_\_\_\_ ID: \_\_\_\_\_

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID     | DATE<br>ANALYZED 1 | DATE<br>ANALYZED 2 |
|------------------|-------------------|--------------------|--------------------|
|                  | LCS 480-51622/2-A | 02/15/2012 10:42   |                    |
| FB12             | 480-16100-1       | 02/15/2012 11:00   |                    |
| FB13             | 480-16100-2       | 02/15/2012 11:17   |                    |
| FB14             | 480-16100-3       | 02/15/2012 11:34   |                    |
| HW21             | 480-16100-4       | 02/15/2012 11:52   |                    |
| HW21Z            | 480-16100-5       | 02/15/2012 12:09   |                    |
| HW22             | 480-16100-6       | 02/15/2012 12:26   |                    |
| HW22-P           | 480-16100-7       | 02/15/2012 12:43   |                    |
| HW23             | 480-16100-8       | 02/15/2012 13:01   |                    |
| HW23-P           | 480-16100-9       | 02/15/2012 13:35   |                    |
| HW38             | 480-16100-10      | 02/15/2012 13:53   |                    |
| HW38-P           | 480-16100-11      | 02/15/2012 14:10   |                    |
| HW44             | 480-16100-12      | 02/15/2012 14:27   |                    |
| HW44 MS          | 480-16100-12 MS   | 02/15/2012 14:45   |                    |
| HW44 MSD         | 480-16100-12 MSD  | 02/15/2012 15:02   |                    |
| HW47             | 480-16100-13      | 02/15/2012 15:19   |                    |
| HW47-P           | 480-16100-14      | 02/15/2012 15:36   |                    |
| HW48             | 480-16100-15      | 02/15/2012 15:54   |                    |
| HW48Z            | 480-16100-16      | 02/15/2012 16:11   |                    |
| HW49             | 480-16100-17      | 02/15/2012 16:46   |                    |
| HW49-P           | 480-16100-18      | 02/15/2012 17:03   |                    |



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 480-51622/1-A  
Matrix: Water Lab File ID: PE09184.d  
Analysis Method: 8015B Date Collected: \_\_\_\_\_  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 10:25  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | 0.820  | J | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 107  |   | 66-130 |

FORM III  
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: PE09185.d  
Lab ID: LCS 480-51622/2-A Client ID: \_\_\_\_\_

| COMPOUND        | SPIKE<br>ADDED<br>(mg/L) | LCS<br>CONCENTRATION<br>(mg/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-----------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| Ethylene glycol | 20.0                     | 19.2                           | 96              | 62-148              |   |

# Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 480-51622/2-A  
Matrix: Water Lab File ID: PE09185.d  
Analysis Method: 8015B Date Collected: \_\_\_\_\_  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 10:42  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | 19.2   |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 110  |   | 66-130 |

FORM III  
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

Lab File ID: PE09199.d

Lab ID: 480-16100-12 MS

Client ID: HW44 MS

| COMPOUND        | SPIKE<br>ADDED<br>(mg/L) | SAMPLE<br>CONCENTRATION<br>(mg/L) | MS<br>CONCENTRATION<br>(mg/L) | MS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-----------------|--------------------------|-----------------------------------|-------------------------------|----------------|---------------------|---|
| Ethylene glycol | 20.0                     | ND                                | 20.0                          | 100            | 50-150              |   |

# Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW44 MS Lab Sample ID: 480-16100-12 MS  
Matrix: Water Lab File ID: PE09199.d  
Analysis Method: 8015B Date Collected: 02/09/2012 14:49  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 14:45  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | 20.0   |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 111  |   | 66-130 |

FORM III  
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

Lab File ID: PE09200.d

Lab ID: 480-16100-12 MSD

Client ID: HW44 MSD

| COMPOUND        | SPIKE<br>ADDED<br>(mg/L) | MSD<br>CONCENTRATION<br>(mg/L) | MSD<br>%<br>REC | %<br>RPD | QC LIMITS |        | # |
|-----------------|--------------------------|--------------------------------|-----------------|----------|-----------|--------|---|
|                 |                          |                                |                 |          | RPD       | REC    |   |
| Ethylene glycol | 20.0                     | 22.8                           | 114             | 13       | 50        | 50-150 |   |

# Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: HW44 MSD Lab Sample ID: 480-16100-12 MSD  
Matrix: Water Lab File ID: PE09200.d  
Analysis Method: 8015B Date Collected: 02/09/2012 14:49  
Sample wt/vol: 0.5(mL) Date Analyzed: 02/15/2012 15:02  
Soil Aliquot Vol.: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51671 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | 22.8   |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 109  |   | 66-130 |

FORM IV  
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.:

Lab Sample ID: MB 480-51944/1-A

Matrix: Water

Date Extracted: 02/17/2012 06:50

Lab File ID: (1) PE09225.d

Lab File ID: (2)

Date Analyzed: (1) 02/17/2012 08:57

Date Analyzed: (2)

Instrument ID: (1) PE-01

Instrument ID: (2)

GC Column: (1) ZB-5 ID: 0.25 (mm)

GC Column: (2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID     | DATE<br>ANALYZED 1 | DATE<br>ANALYZED 2 |
|------------------|-------------------|--------------------|--------------------|
|                  | LCS 480-51944/2-A | 02/17/2012 09:14   |                    |
| HW51             | 480-16100-19      | 02/17/2012 09:59   |                    |
| HW51-P           | 480-16100-20      | 02/17/2012 10:17   |                    |



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 480-51944/1-A  
Matrix: Water Lab File ID: PE09225.d  
Analysis Method: 8015B Date Collected: \_\_\_\_\_  
Sample wt/vol: .5(mL) Date Analyzed: 02/17/2012 08:57  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51962 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | ND     |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 100  |   | 66-130 |

FORM III  
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-16100-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

Lab File ID: PE09226.d

Lab ID: LCS 480-51944/2-A

Client ID: \_\_\_\_\_

| COMPOUND        | SPIKE<br>ADDED<br>(mg/L) | LCS<br>CONCENTRATION<br>(mg/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-----------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| Ethylene glycol | 20.0                     | 19.2                           | 96              | 62-148              |   |

# Column to be used to flag recovery and RPD values

FORM III 8015B

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-16100-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 480-51944/2-A  
Matrix: Water Lab File ID: PE09226.d  
Analysis Method: 8015B Date Collected: \_\_\_\_\_  
Sample wt/vol: .5(mL) Date Analyzed: 02/17/2012 09:14  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: ZB-5 ID: 0.25(mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 51962 Units: mg/L

| CAS NO.  | COMPOUND NAME   | RESULT | Q | RL | MDL  |
|----------|-----------------|--------|---|----|------|
| 107-21-1 | Ethylene glycol | 19.2   |   | 10 | 0.76 |

| CAS NO.  | SURROGATE      | %REC | Q | LIMITS |
|----------|----------------|------|---|--------|
| 110-63-4 | 1,4-Butanediol | 101  |   | 66-130 |